ORDS CENTER REGION 5

217/782-2113

Application No.: C903052

I.D. No.: 163121AAC 219A-R1

Received: March 28, 1979

Construction of: Orthonitroaniline Dust Collector

Location: Route 3, Sauget

April 6, 1979

Monsanto Company 800 North Lindbergh St. Louis, Missouri 63166

Attention: J. W. Molloy

Gentlemen:

Permit is hereby granted to construct the above-referenced equipment. This permit is granted subject to the following conditions:

1. Standard conditions attached hereto and incorporated herein by reference.

Very truly yours,

Frederick L. Crawford, P.E. Analysis Unit Manager, Permit Section Division of Air Pollution Control

FLC:RAC:b1d/7876a/16

CALCULATION SHEET

| Facility | MONSANTO - SAUGET | I.D. | 163 121 AAC |
|------------|-------------------|---------|-------------|
| Anal. Eng. | RAC Date 040379 | PN | C 9 03 052 |
| Rev. Eng. | Date | Date Re | c. 032879 |

| | ۶A | P_ | 7, | 8 | R | E | ρ | | 7 C | E | E | X | 15 | 77 | N | U) | B | A | St | 4 | ويرا | ϵ | NA C | Th | E | OR IE | THE | S/ | TR# | AA |
|---|--------------|----------|---------|------------|-----|----------|----|-----|--------|----------|----------|--------------|----|----|-----|-----|----------|------------|----|----|------|------------|------|----|----|----------|-----|--|----------|----|
| 1 | nø | R | 5 | _ | S | PI | 6 | k, | 16 | 57 | <u>-</u> | 1 | 3/ | 10 | 1 | 4 | در) | E | | 13 | | de | ve | 72 | E | 511 | 113 | 5/5 | 51 | 25 |
| } | Co | 70 | 2 | | d f | <u>*</u> | 50 | 57 | 77. | V | | R | P | Pp | 36 | 5 | E | ZX. | • | P | U | C | | 90 | 30 | 25 | == | \$ | | |
| | PA | RE | 3/ | <u>'</u> (| ØL | در | | E | 3 | | 1.5 | 5 | */ | #_ | | - | | | | | | | | | | D | | | | |
| P | W | 3 : | | 2 | | 20 | 0 | # | 14 | l . | - | 5, | 14 | de | ٠ ر | = | 4. | 14 | # | H | | PX | ø. | n | | 20 | 3 | a | 2 | |
| 5 | = | % | | / | 2 | | - | | | | - | | | - | | | | | | | | | | | - | - | | | | |
| 2 | 3 0 | | CP | U | TP. | de | 61 | 1 | 2: | 3 7 | T/A | | | 4 | - | 7. | E | Z | 3 | X | 0, | 03 | 39 | = | U, | 8 | 97 | # | 4 - | 24 |
| | | - | | | | | - | | | - | - | | | | | | | | | | | | | | | | | | | 1 |
| | | 45 | 5 | _ | C | 8 | 9: | 2 : | + | 0. | 60 | 23 | 7 | | 4 | 9 | SF, | <i>-</i> 5 | 5) | | | | | | | | 6 | e/ | <u> </u> | Z |
| | 11 | V | VZ | <u> </u> | 7 | | Ø | R | y | | 7 | 1 | - | | | | | | | | | | - | | | | | | | |
| 1 | P = | | | | 26 | | | 5. | 8 | | | | | | | | - | | | | | | | | | | | 200 | | |
| | | + | + | - | | | | + | | - | | - | | | - | | | | 1) | | | | , | | | 3 | | la | 2 | 9 |
| - | | + | - | | | | | - | - | | | - | | | | - | | | | | | | | | | 0 | 70 | 73 | 7 | |
| | | + | + | | | | | | | | | | | | | - | | | | | | | | | | | | - | | |
| | | + | | | | | 1 | - | +- | <u> </u> | <u> </u> | | | - | | | - | | | | | | | | | | | | | |
| + | - | 1 | \perp | | | | - | - | | | | | | | | | | | | | | | | | | | | | | |
| 1 | \top | 1 | + | | - | T | T | + | \top | | | | 1. | T | | | | | | | | 1. | | | | | | | \prod | |

Monsanto

MONSANTO CHEMICAL INTERMEDIATES CO.

Sauget, Illinois 62201 Phone: (618) 271-5835

March 15, 1979

Mr. M. J. Hayes, P.E. Manager, Permit Section Division of Air Pollution Control Illinois Environmental Protection Agency 2200 Churchill Road Springfield, IL 62706 RECEIVED
MAR 28 1979
IEPA-DAPC-SPFLD

Reference: ID No. 163 121 AAC

2 new C dermits

Operating Permit Numbers

Source Numbers (existing) New Source Numbers

02100066

219A

219AR1

04030078 \$308005\$ 222FR AG

AG 1 222 FR 2

Dear Mr. Hayes:

Two construction permit applications are attached both for modification of existing sources. New source numbers are indicated above have been assigned.

The following information is submitted in accordance with the Rules for Issurance of Permits to New or Modified Air Pollution Emission Sources in non-attainment areas.

- 1) The two sources for which construction permits are submitted are to be located in a non-attainment area for total suspended particulates (TSP) and will emit less than 25 tons/year TSP.
- 2) Source 219A is being modified with an improved bag dust collector. This unit provided the lowest achievable emission rate (LAER) results. The emission will be reduced from 1.5 pounds per hour to 0.90 pounds per hour for a net reduction of 0.6 pounds per hour.

- Source 222FR2 is being modified with a larger and improved design wet scrubber. This unit provides the lowest achievable emission rate (LAER) results. Air and solids loading to scrubber will be increased to 10,000 ACFM from 1,810 ACFM. Emissions will increase from
- This net increase of 0.46 pounds per hour is offset by the reduction of 0.6 pounds per hour from Source 219A.
 - 4) Cerfification is made that all sources owned and operated by Monsanto Company at W. G. Krummrich Plant which are located or significantly contribute to air quality levels in the non-attainment area will be in compliance with all applicable SIP requirements and state rules and regulations by the time the new or modified sources are operational.

Please note that this source application is marked "confidential" and should be handled in accordance with the confidentiality provision of the Illinois Environmental Protection Act.

Your approval of these operating permit applications for renewal is respectfully requested.

Sincerely,

J. W. Molloy Plant Manager

JWM:1j1

CONFIDENTIAL

TABLE OF CONTENTS FOR 219AR1

| 1 | Authorization | to | Sign | Permit | 1 | page |
|---|---------------|----|------|---------|-------------|-------|
| 1 | APC 200 | | | | 2 | pages |
| 1 | APC 210 | | | | 1 | page |
| 1 | APC 220 | | | • | -2 | pages |
| 1 | APC 231 | | | | 1 | page |
| 1 | APC 260 , | | | | 6 | pages |
| 1 | APC 103 | • | • | | 2 | pages |
| 1 | Dwg. 219AR1 | | | · | 1 | page |
| | | | | | | |
| | | | | Total - | 16 | pages |

63



| · | | . 1 | | FOR | AGENCY USE ONLY |
|---|--|-------------------------------|----------------------|---|---|
| APPLICATION FOR A PERMI | IT _{fa.} | İ | I. D. | 1/a | 3121AAC |
| 🖾 CONSTRUCT 🔲 OPER | W . / | 1 | | | <u> </u> |
| Orthonitroanil: | | 1 | PERMI | T NO | 103052 |
| NAME OF EQUIPMENT TO BE | | | DATE | 03 | 3-28-29 |
| CONSTRUCTED OR OPERATED DUST COLLECTOR | | (B) | | | |
| | | | <u></u> | | |
| la. NAME OF OWNER: | | 2a. NAME OF | F OPERATOR: | | |
| Monsanto Company | | MCI-A | unit o | f Monsanto | Company |
| 1b. STREET ADDRESS OF OWNER: | | 2b. STREET | ADDRESS OF | OPERATOR: | |
| 800 N. Lindbergh | | | ute 3 | · | |
| 1c. CITY OF OWNER: St. Louis | | 2c. CITY O | | | |
| 1d. STATE OF OWNER: 1e. ZII | P CODE: | Sauge 2d. STATE (| | <u> </u> | 2e. ZIP COOE: |
| 1 | 3166 | | nois | | 62201 |
| | <u> </u> | | 110.18. | <u> </u> | |
| · | | | | | · |
| 3a. MAME OF CORPORATE DIVISION OR PLANT: | | 3b. STREET | ADDRESS OF | EMISSION SOURCE: | , |
| W. G. Krummrich Plant Monsa | nto Co. | | te 3 | | |
| 3c. CITY OF EMISSION SOURCE: 3d. LOCA | ATED WITHIN CITY | 3e. TOWNSH | | 3f. COUNTY: | 3g. ZIP CODE: |
| Sauget | YES NO | Centre | ville | St. Clair | 62201 |
| | | | | • | |
| 4. ALL CORRESPONDENCE TO: (NAME OF INDIVIDUAL) | | • | | FOR AGENCY TO CALL: | |
| J. W. Molloy | | 618 | <u>-271-5</u> | 835 . | |
| 6. ADDRESS FOR CORRESPONDENCE: (CHECK ONLY ONE) OPERATOR | EMISSION SOURCE | 7. YOUR II 219 | D NUMBER FOI A-R1 | R THIS APPLICATION: | c) |
| O'ENTON | EHISSION SOURCE | , === | | | |
| | · | | | • | |
| 8. THE UNDERSIGNED HEREBY MAKES APPLICATION FOR A P | ERMIT AND CERTIF! | ES THAT THE | STATEMENTS | CONTAINED HEREIN ARE | TRUE AND CORRECT, AND |
| FURTHER CERTIFIES THAT ALL PREVIOUSLY SUBMITTED BY AFFIXING HIS SIGNATURE HERETO HE FURTHER CERT | INFORMATION REFER | RENCED IN THIS | S APPLICATI | ON REMAINS TRUE, COF | RECT AND CURRENT. |
| | • | | | | |
| AUTHORIZER SIGNATURE(S):(D) | 1 1 . | | | | |
| or Vellallon | 3/22/19 | BY | | • | · |
| SIGNATURE | DATE | 31 | GNATURE | | DATE |
| J. W. Molloy AYPED OR PRINTED NAME OF SIGNER | | TV | DEN NO DOTA | TED NAME OF SIGNER | · . |
| Plant Manager | | • • • | FED OR FRIM | | |
| TITLE OF SIGNER | | π | TLE OF SIGN | ER | |
| (A) THIS FORM IS TO PROVIDE THE AGENCY WITH GENERAL ONLY BE USED TO REQUEST ONE TYPE OF PERMIT - COM | INFORMATION ABOUT | T THE EQUIPME | ENT TO BE CO | INSTRUCTED OR OPERAT | ED. THIS FORM MAY |
| | | | | | ADDEAD ON THE |
| (B) CLEARLY IDENTIFY THE GENERIC NAME OF THE EQUIPME PERMIT WHICH MAY BE ISSUED PURSUANT TO THIS APPL | LICATION. THIS F | ORM MUST BE A | ACCOMPANIED | BY THE APPLICABLE A | DDENDA. |
| (C) PROVIDE A NUMBER IN ITEM 7-ABOVE WHICH YOU MOULE NUMBER WILL BE REFERENCED IN ALL CORRESPONDENCE, MOT EXCEED TEN (10) CHARACTERS. | D LIKE THE AGENCY , RELATIVE TO THI | TO USE FOR 1 S APPLICATION | IDENTIFICATI | TOK OF YOUR EQUIPMENTS AGENCY. YOUR TOEN | T. YOUR IDENTIFICATION DIFFICATION NUMBER HUST CEIVED |
| (D) THIS APPLICATION MUST BE SIGNED IN ACCORDANCE WE "ALL APPLICATIONS AND SUPPLEMENTS THERETO SHALL CONTROL EQUIPMENT, OR THEIR AUTHORIZED AGENT, AN | ITH PCB REGS CH | APTER 2. PART | T 1. RULE 10 | 3(a)(4) OR 103(b)(5 |) WHICH STATES: |
| IF THE OWNER OR OPERATOR IS A CORPORATION, SUCH OF THE CORPORATION'S BOARD OF DIRECTORS AUTHORIZ OPERATION OF THE CULTIMENT TO BE COVERED BY THE | ZING THE PERSONS | HAVE ON FILE | E WITH THE A | AGENCY A CERTIFEDA N TO CAUSE OR ALLOW | OPY AOBA RESOLUTION THE CONSTRUCTACHE OR |

| • | A CONSTRUCTION PER | RUPLICATE. | ISTRUCTION IN COO | CATE. COUNTY OUTSIDE OF THE CORP | | |
|--------|---|---|--|---|--|---|
| | LOCATED AND DISTAN | ICES TO THE NEAREST RES. | IDENCES, LODGINGS, | STANCES TO THE NEAREST BOUND , MURSING HOMES, HOSPITALS, BEEN SUBMITTED, INDICATE THEAACAPPLICATION NO. | SCHOOLS AND COMMERI ASSOCIATED AGENCY | CTAL AND MANUEACTIDING |
| 11. | BY THIS PERMIT API EQUIPMENT, AND SH | PLICATION. THE DIAGRAM | SHALL INCLUDE LA LOW RATES FOR (1) | NG ALL EMISSION SOURCES AND BELS FOR EACH EMISSION SOURC ALL PROCESSING EQUIPMENT. (ER OF SHEETS: 1 | E AND FACH ITEM OF | AIR POLLUTION CONTROL ON CONTROL EQUIPMENT, (3) |
| 12. | SHALL COMPLETE AND | SUBMIT THE APPLICABLE | PERMIT APPLICATION | ONTROL EQUIPMENT IDENTIFIED IN FORMS. THE FLOW DIAGRAM OUIPMENT IS EXHAUSTED. IF I | SHALL INDICATE THRO | |
| is. | IF 415 15 AN APPL OR CONSTRUCTION PE | ICATION FOR AN OPERATIF | NG PERMIT, AND THE TE FORM APC-210, | APPLICANT IS INCORPORATING ENTITLED "DATA AND INFORMA | BY REFERENCE PREVIO | DUSLY GRANTED INSTALLATION |
| 14. | AN AIR CONTAMINAN | ICATION FOR AN OPERATION IN EXCESS OF APPLICABUILED "OPERATION DURING | LE STANDARDS, THE STARTUP." | STARTUP OF ANY EMISSION SOL APPLICANT MAY REQUEST PERMI | JRCE DESCRIBED BY T SSION TO EXCEED SU | HIS APPLICATION PRODUCES CH STANDARDS BY COMPLETING |
| 15. | DURING MALFUNCTION | LICATION FOR AN OPERATI NS OR BREAKDOWNS PURSUA PC-204, ENTITLED "OPERA | NT TO PCB REGS | E APPLICANT IS APPLYING FOR CHAPTER 2, RULE 105, THE APP NCTION AND BREAKDOWN." | PERMISSION TO OPER LICANT MAY REQUEST | ATE AN EMISSION SOURCE SUCH PERMISSION BY |
| 16. | IF THIS IS AN APPI | LICATION FOR AN OPERATION FOR AN OPERATION | NG PERMIT AND ALL | OR ANY PART OF THE PROCESS | MUST BE CONTROLLED | OR MODIFIED TO COMPLY PROJECT COMPLETION SCHEDULE. |
| 17. | | LICATION FOR AN OPERATIO | NG PERMIT, DOES TO | E OPERATION COVERED BY THIS | | |
| 18. | WAS EACH EMISSION GOVERNING THE CONT | SOURCE COVERED BY THIS | APPLICATION, AS (| OF APRIL 14, 1972, IN COMPLI ORMER AIR POLLUTION CONTROL X YES N | ANCE WITH THE "RULI BOARD AND CONTINUE 0 | ES AND REGULATIONS DEFFECTIVE PURSUANT |
| 19. | | LICATION FOR AN OPERATION BOARD ON OR BEFORE JUNE | | E OPERATION THE SUBJECT OF A | | FILED WITH THE ILLINOIS |
| | IF "YES," CITE PC | B NUMBER(S): | | DATE OF BOARD ORDER: | | |
| | WITH THE APPLICABL | LE LIMITATIONS OF THE "I | RULES AND REGULATI | CONSTRUCTION OF EQUIPMENT OR CONS GOVERNING THE CONTROL OF SECTION 49(c) OF THE ENVI | F AIR POLLUTION." / | FICIENT TO ACHIEVE COMPLIANCE DOPTED BY THE FORMER AIR ON ACT? YES NO |
| | IF "NO," EXPLAIN | IN DETAIL AND MARK YOUR | EXPLANATION AS E | CHIBIT D. | - | |
| | TOTAL NUMBER OF PA | AGES IN EXHIBIT D: | · | | | • |
| 20. | PARTICULATE MATTE ON THE PLANT OR P | R. SURFUR DIOXIDE, CARB | ON MONOXIDE. OXID SHALL INCLUDE ALI | PLICANT SHALL SUBMIT AN ESTI ES OF NITROGEN, AND ORGANIC L EMISSION SOURCES LOCATED O | MATERIAL EMITTED F | ROM ALL SOURCES LOCATED |
| | Material | MAXIMUM ONE-HOUR AMOUNTS | MATERIAL | MAXIMUM ONE-HOU AMIONES | R | MAXIMUM ONE-HOUR |
| | CULATE | • | SJLFUR DIOXIDE | | NITROGEN OXIDES | |
| MATTE | . | 106 . | | 200 | 0 LB | 600 |
| 000.44 | ur. | 105_L | B Carbon | 200 | . ← LB | |
| ORGAN | IAL" | .• | (OX IDE | | | |
| | | 50. լ | *. *. *. * B | | 25 LB | |
| 21. | WHAT IS THE SIZE | (IN ACRES) OF APPLICANT | 'S PREMISES? | g Area 96.538 | | |
| 22. | LIST AND IDENTIFY | | NO OTHER INFORMAT | ION SUBMITTED AS PART OF THE | IS APPLICATION. PL | EASE NUMBER EVERY PAGE |
| | | | · | | FUDIA | page 3 of 1 |



| | FOR AGENCY USE ONLY |
|--|--|
| . DATA AND INFORMATION | |
| • | |
| INCORPORATION BY REFERENCE | |
| · · | |
| | |
| | |
| 1. NAME OF OWNER: | 2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER): |
| Monsanto Company | W. G. Krummrich Plant |
| 3. STREET ADDRESS OF EMISSION SOURCE: | 4. CITY OF EMISSION SOURCE: |
| Route 3 | Sauget |
| 5. IDENTIFICATION NUMBER: 163 121 AAC | |
| | |
| • · | |
| | |
| 6a. APPLICATION NUMBER: | b. IDENTIFICATION ON FLOW DIAGRAM: |
| 02100066 | 219A |
| CONSTRUCTION SC OPERATION OF ONA Flaker & Dust Collector | r W A |
| d. DOES THE DATA & INFORMATION PREVIOUSLY SUBMITTED REMAIN TRUE, CORP | RECT. CURRENT & COMPLETE? |
| | |
| e. IF "NO," SUBMIT THE APPLICABLE FORMS OR CLEARLY STATE THE DATA & IN | NFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT AND COMPLETE. |
| <u></u> | |
| · | |
| 7a. APPLICATION NUMBER: | b. IDENTIFICATION ON FLOW DIAGRAM: |
| c. CONSTRUCTION OPERATION | <u> </u> |
| | |
| d. DOES THE DATA & INFORMATION PREVIOUSLY SUBMETTED REMAIN TRUE, CORP | ☐ YES ☐ NO |
| e. IF "NO, "SUBMIT THE APPLICABLE FORMS OR CLEARLY STATE THE DATA & IN | NFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT AND COMPLETE. |
| | |
| 8a. APPLICATION NUMBER: | b. IDENTIFICATION ON FLOW DIAGRAM: |
| | 1 |
| 2. CONSTRUCTION OPERATION | |
| OF | |
| d. DOES THE DATA & INFORMATION PREVIOUSLY SUBMITTED REMAIN TRUE, CORR | RECT, CURRENT & COMPLETE? |
| | LI TES LI NO |
| e. IF "NO, "SUBMIT THE APPLICABLE FORMS OR CLEARLY STATE THE DATA & IN | AFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT AND COMPLETE. |
| <u></u> | |
| | |
| 9a. APPLICATION NUMBER: | b. IDENTIFICATION ON FLOW DIAGRAM: |
| 72. | |
| .C. CONSTRUCTION OPERATION | The Lord Control of the Lo |
| of | |
| 4. DOES THE DATA & INFORMATION PREVIOUSLY SUBMITTED REMAIN TRUE, CORP | RECT, CURRENT & COMPLETE? YES NO |
| . IF "NO." SUBMIT THE APPLICABLE FORMS OR CLEARLY STATE THE DATA & I' | NFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT AND COMPLETE: |
| 4 | |



| ٠ | NΑ | TA | A 1 | Jn | IN | 5 | D 44 | ATI | ION | ı |
|---|----|----|-----|----|----|---|------|-----|-----|---|
| | | | | | | | | | | |

AIR POLLUTION CONTROL EQUIPMENT

*THIS INFORMATION FORM IS FOR AN INDIVIDUAL UNIT OF AIR POLLUTION CONTROL EQUIPMENT OR AN AIR POLLUTION CONTROL SYSTEM.

| | 1 |
|--|---|
| NAME OF OWNER: | 2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM |
| Monsanto Company | OWNER): W. G. Krummrich Plant |
| STREET ADDRESS OF CONTROL EQUIPMENT: | 4. CITY OF CONTROL EQUIPMENT: |
| Route 3 | Sauget |
| NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: | |
| | |
| Bag Dust Collector | |
| | Monsanto Company STREET ADDRESS OF CONTROL EQUIPMENT: Route 3 NAME OF CONTROL EQUIPMENT OR CONTROL SYSTEM: |

INSTRUCTIONS

- COMPLETE THE ABOVE IDENTIFICATION.
- COMPLETE THE APPROPRIATE SECTION FOR THE UNIT OF CONTROL EQUIPMENT, OR THE APPROPRIATE SECTIONS FOR THE CONTROL SYSTEM. BE CERTAIN THAT THE ARRANGEMENT OF VARIOUS UNITS IN A CONTROL SYSTEM IS MADE CLEAR IN THE PROCESS FLOW DIAGRAM.

- COMPLETE PAGE 6 OF THIS FORM, EMISSION INFORMATION AND EXHAUST POINT INFORMATION.
 EFFICIENCY VALUES SHOULD BE SUPPORTED WITH A DETAILED EXPLANATION OF THE METHOD OF CALCULATION, THE MANNER OF ESTIMATION, OR THE SOURCE OF INFORMATION. REFERENCE TO THIS FORM ANY RELEVANT INFORMATION OR EXPLANATION INCLUDED IN THIS PERMIT APPLICATION.
- EFFICIENCY VALUES AND CERTAIN OTHER ITEMS OF INFORMATION ARE TO BE GIVEN FOR AVERAGE AND MAXIMUM OPERATION OF THE SOURCE EQUIPMENT. FOR EXAMPLE, "MAXIMUM EFFICIENCY" IS THE EFFICIENCY OF THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT MAXIMUM OPERATION, AND "AVERAGE FLOW RATE" IS THE FLOW RATE INTO THE CONTROL EQUIPMENT WHEN THE SOURCE IS AT AVERAGE OPERATION.
- FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS", APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT SUMMARIZES OF REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE OR THE GENERAL STATE OF PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FROM THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY: MAXIMUM OPERATION - THE GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.

| CYCL | ONE |
|---|--|
| 1. FLOW DIAGRAM DESIGNATION(S) OF CYCLONE: | |
| 2. MANUFACTURER: | 3. MODEL: |
| 2. MANUFACTURER: | <u>i </u> |
| 4. TYPE OF CYCLONE: | 5. NUMBER OF CYCLONES IN EACH MULTIPLE CYCLONE: |
| SIMPLE MULTIPLE 6. DIMENSION THE APPROPRIATE SKETCH (IN INCHES) OR PROVIDE A S | DRAWING WITH FOLITIVALENT INFORMATIONS |
| 6. DIMENSION THE APPROPRIATE SKETCH (IN INCHES) OR PROVIDE A E | DAMING WITH EGOLVALENT INFORMATION: |
| TANGENTIAL INLET CYCLONE | AXIAL INLET CYCLONE (INDIVIDUAL CYCLONE OF MULTIPLE CYCLONE) |
| GAS OUT | |
| A | |
| → | GAS OUT |
| GAS IN | GAS IN VANE ANGLE DEGREES |
| | |
| SECTION | |
| | |
| | SECTION SECTION |
| PLAN | • |
| NOT T | O SCALE |
| AVERAGE OPERATION OF SOURCE | MAXIMUM OPERATION OF SOURCE |
| 7. GAS FLOW RATE: | 9. GAS FLOW RATE: |
| 8. EFFICIENCY OF CYCLONE (SEE INSTRUCTION 4): % | 10. EFFICIENCY OF CYCLONE (SEE INSTRUCTION 4): |
| | Ollege page 10 of 16 |

| • | SCRU | JBBER | | |
|---|----------------|-----------------------|-----------------------|----------------|
| 1. FLOW DIAGRAM DESIGNATION(S) OF SCRUBBER: | | | | |
| 2. MANUFACTURER: | | 3. MODEL NAME AND | NUMBER: | |
| 4. TYPE OF SCRUBBER: HIGH ENERGY: GAS STREAM PRESSURE DROP | IN | сн н ₂ 0 | | |
| PACKED: PACKING TYPE, PACKING | SIZE | , PACKED HEIGHT | IN. | |
| SPRAY: NUMBER OF NOZZLES, NO | OZZLE PRESSUR | E PSIG | | |
| | IPTION AND S | KETCH WITH DIMENSIONS | | · |
| 5. TYPE OF FLOW: COCURRENT COUNTERCURRENT | CROSSFLOW | | | |
| 6. SCRUBBER GEOMETRY: LENGTH IN DIRECTION OF GAS FLOW | IN., CRO | SS-SECTIONAL AREA | SQUARE IN. | |
| 7. CHEMICAL COMPOSITION OF SCRUBBANT: | | | | |
| AVERAGE OPERATION OF SOURCE | | IMIXAM | UM OPERATION OF SO | URCE |
| 8. SCRUBBANT FLOW RATE: | GPM | 12. SCRUBBANT FLOW R | ATE: | GPM |
| 9. GAS FLOW RATE: | SCFM | 13. GAS FLOW RATE: | | SCFM |
| 10. INLET GAS TEMPERATURE: | o _F | 14. INLET GAS TEMPERA | TURE: | o _E |
| 11. EFFICIENCY OF SCRUBBER (SEE INSTRUCTION 4): | <u>'</u> | 15. EFFIEICNCY OF SCR | UBBER (SEE INSTRUCTIO | |
| | | | | • |
| | | NTROL EQUIPMENT | | |
| 1. FLOW DIAGRAM DESIGNATION(5) OF "OTHER TYPE" C | OF CONTROL E | QUIPMENT: | | |
| 2. GENERIC NAME OF "OTHER" EQUIPMENT: 3 | . MANUFACTI | JRER: | 4. MODEL NAME | AND NUMBER: |
| 5. DESCRIPTION AND SKETCH, WITH DIMENSIONS AND | FLOW RATES, O | OF "OTHER" EQUIPMENT: | | |
| | | | • | • |
| | | | | |
| | | • | | |
| | | | | |
| 1 | · • | • | | n |
| | | • | | |
| 7 | | | e sampanaa jaga | ment . |
| | | | land was | Man |
| • | • | | | |
| AVERAGE OPERATION OF SOURCE | | MAXIA | NUM OPERATION OF SC | DURCE |
| 6. FLOW RATES: GPM SCFM | | 8. FLOW RATES: | GPM | SCFM |
| 7. EFFICIENCY OF "OTHER" EQUIPMENT (SEE INSTRUCTIO | N 4): | 9. EFFICIENCY OF "OT | | |
| | <u>%</u> | <u> </u> | pag | e 12 of 16 |

| | | | • | EMISSION INF | ORMATIO | N | |
|-----------------------|---|---------------|---------------|---------------------------------------|--------------|---|---|
| 1. NUMBER C | OF IDENTICAL CO | NTROL UNITS (| OR CON | ITROL SYSTEMS (| DESCRIBE A | S REQ | OUIRED): |
| | | · <u>-</u> | - | AVERAGE OPERA | TION OF | SOUR | CE |
| CONTAMINANT | AMINANT CONCENTRATION OR EMISSION RATE PER IDENTICAL CONTROL UNIT OR CONTROL SYSTEM | | | | , | METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE | |
| PARTICULATE MATTER | 2a. 0.0300 |) GR/SCF | ь. | 0.90 | LB/HR | c. | Engineering Calculations |
| CARBON MONOXIDE | 3a. | PPM (VOL) | ь. | | LB/HR | c. | & vender guarentees |
| NITROGEN OXIDES | 4a. | PPM (VOL) | ь. | | LB/HR | c. | • |
| ORGANIC MATERIAL | 5a. | PPM (VOL) | ь. | • | LB/HR | c. | |
| SULFUR DIOXIDE | 6a. | PPM (VOL) | ь. | · · · · · · · · · · · · · · · · · · · | L8/HR | c. | |
| OTHER (SPECIFY) | 7a. | PPM (VOL) | b., , | | LB/HR | c. | |
| | | | | MAXIMUM OPER | O MOITA | SOU | RCE. |
| CONTAMINANT | | ATION OR EMIS | | ATE PER IDENTICA | AL. | | METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE |
| PARTICULATE MATTER | 8a. 0.03 | 300 GR/SCF | ь. | 0.90 | LB/HR | c. | Engineering Calculations |
| CARBON MONOXIDE | 9a. | PPM (VOL) | ь. | | LB/HR | c. | & vender guarentees |
| NITROGEN OXIDES | 10a. | PPM (VOL) | ь. | | LB/HR | c. | |
| ORGANIC MATERIAL | 11a. | PPM (VOL) | ь. | | LB/HR | ů. | |
| SULFUR DIOXIDE | 12a. | PPM (VOL) | ь. | | LB/HR | c. | • |

^{**&}quot;OTHER" CONTAMINANT SHOULD BE USED FOR AN AIR CONTAMINANT NOT SPECIFICALLY NAMED ABOVE. POSSIBLE OTHER CONTAMINANTS ARE ASBESTOS, BERYLLIUM, MERCURY, VINYL CHLORIDE, LEAD, ETC.

LB/HR

| | EXHAUST POIN | IT INFORMATION |
|----|--|---|
| ١. | FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: 219A | |
| 2. | DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BE | JILDINGS, DIRECTION, HOODING, ETC.): |
| | Exhaust direction N.W. Horizontal | Discharge |
| 3. | EXIT HEIGHT ABOVE GRADE: | 4. EXIT DIAMETER: |
| | Approx. 40 ft. | 16 inches |
| 5. | GREASTEST HEIGHT OF NEARBY BUILDINGS: | 6. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: |
| | 30 ft. , FT | 300 FT |
| | AVERAGE OPERATION OF SOURCE | MAXIMUM OPERATION OF SOURCE |
| 7. | EXIT GAS TEMPERATURE: | 9. EXIT GAS TEMPERATURE: |
| | 125 °F | 125 °F |
| 8. | GAS FLOW RATE THROUGH EACH EXIT: | 10. GAS FLOW RATE THROUGH EACH EXIT: |
| | 3500 ACFM | 3500 ACFM: |

(VOL)

OTHER (SPECIFY)



| <u> </u> | ····· | | | | · | |
|---|--------------------------|----------------|--|------------------|---------------------------------------|--|
| | • | | 1 | FOR AGENCY US | EONLY | |
| | | REFERENCE 1.D |), NO | | | |
| | | REFERENCE PER | • | | | |
| DISPOSITION OF W | ne (ONA) | 1 | DATE | | | |
| I NAMP OF FUILIPMPNI UK PRUK FSS IUI | ake Dust Colle | | | | | |
| | | | <u> </u> | . | · · · · · · · · · · · · · · · · · · · | |
| | · | | | | | |
| Io. NAME OF OWNER: Monsanto ompany | | | 20. NAME OF OPERATOR: MCI-A unit of Monsanto Company | | | |
| | | | 2b. STREET ADDRESS OF OPERATOR: | | | |
| 1 800 N. Lindgergh | | | Route 3 | | | |
| | | | 2c. CITY OF OPERATOR: | | | |
| St. Louis Id. STATE OF OWNER: | le. ZIP CODE: | Sauge | F OPERATOR: | 2e. ZIP CODE: | | |
| Missouri | 63166 | 1111 | | 62201 | | |
| | | | | | | |
| | | - (-) | | • | · · · · · · · · · · · · · · · · · · · | |
| 30. NAME OF CORPORATE DIVISION OR PLANT: W. G. Krummrich Plant | | | 3b. STREET ADDRESS OF EMISSION SOURCE: Route 3 | | | |
| 3c. CITY OF EMISSION SOURCE: | 34. LOCATED WITHIN CITY | Y 3e TOWNS | 3e TOWNSHIP: 3f COUNTY: | | 3a. ZIP CODE: | |
| Sauget | LIMITS: X YES I | NO Centr | eville S | t. Clair | 3g. ZIP CODE: 62201 | |
| , | | | | | | |
| 4. ALL CORRESPONDENCE TO: (NAME OF INDIVIDUAL) | | | 5. TELEPHONE NUMBER FOR AGENCY TO CALL: | | | |
| J. W. Molloy | | | 618-271-5825 | | | |
| 6. ADDRESS FOR CORRESPONDENCE: (CHECK ONLY ONE) OWNER OPERATOR EMISSION SOURCE | | | 7. YOUR ID NUMBER FOR THIS APPLICATION:(C) 219A-R1 | | | |
| | | 2132 | r-vr | | | |
| | | | | | | |
| (A) THIS FORM IS TO BE COMPLETED FOR AN THAT MAY BE DISPOSED OF IN A MANN | | | | | | |
| WITH MATTER FROM OTHER SOURCES OR | SO AS TO VIOLATE REGULA | | | | | |
| UNDER THE ENVIRONMENTAL PROTECTION | ON ACT. | | | | • | |
| (B) ENTER INFORMATION HERE FROM COMP | ARABLE BLOCK ON APC-20 | - "APPLICATIO | N-FOR A PERMIT". | | | |
| (C) ENTER INFORMATION IN ITEM 7 ABOVE | SAME AS ITEM 7 APC-200 - | "APPLICATION | FOR A PERMIT". | | | |
| (D) IF ADDITIONAL SPACE IS REQUIRED USE AS IT APPEARS ON THIS FORM. | ADDITIONAL SHEETS, ATTA | CH AND IDENTIF | Y INFORMATION | BY APPROPRIATE B | LOCK NUMBER | |
| | | | | | | |
| THIS ADDENDUM WILL BE REVIEWED BY THE | | | | | | |
| DETAILED APPLICATION FOR A PERMIT WILL I BE CONSIDERED TO BE AN APPLICATION FOR | | | | | | |
| LAND POLLUTION CONTROL, IF IT IS DEEME | | | | | | |
| l | | | | | | |

8. BRIEFLY DESCRIBE THE PROCESS WHICH WILL RESULT IN THE PRODUCTION OF WASTE MATERIAL:

Bag Dust Collector

109Rallo

| , | • |
|----------|---|
| 10., | FOR THE WASTE STATE THE CHEMICAL COMPOSITION, EXPRESSED AS WEIGHT PERCENTAGES OF SOLID WASTE OR IN MILLIGRAMS PER LITER FOR LIQUIDS: |
| | |
| 10a. | STATE VOLUME & WEIGHT OF THE WASTE GENERATED BY THIS OPERATION: DAILY 7.2/DAY WEEKLY 50.4/WK MONTHLY 201.6/MO. YEARLY 2520 /YR OTHER EXPLAIN |
| | |
| lla. | WILL THE WASTE MATERIAL BE DEPOSITED IN A SANITARY LANDFILL PERMITTED BY THE ENVIRONMENTAL PROTECTION AGENCY? |
| | YES X NO |
| IJЬ. | IF THE ANSWER TO IO IS "YES", STATE THE NAME AND AGENCY SUPPLEMENTAL PERMIT NUMBER OF SUCH SITE. |
| | NAMESUPPLEMENTAL PERMIT NO |
| | |
| 120. | WILL THE WASTE MATERIAL BE STORED OR PROCESS AT THE APPLICANT PLANT OR PREMISES? |
| 12b. | IF THE ANSWER TO 120 IS "YES", EXPLAIN. |
| | Waste Material will be recycled to process. |
| | (See dwg. No. 219A-R1) |
| | |
| | |
| 130. | WILL THE WASTE MATERIAL BE TRANSPORTED TO A REMOTE SITE FOR STORAGE, PROCESSING, OR DISPOSAL? YES X NO |
| 13Ь. | IF THE ANSWER TO 130 IS "YES", EXPLAIN. |
| l | |
| | |
| | |
| <u> </u> | • |
| | |
| 140. | WILL THE WASTE MATERIAL BE INCINERATED? |
| 146. | IF THE ANSWER TO 140 IS "YES", EXPLAIN. |
| | |
| | |
| | |
| | |
| 16- | IF THE WASTE WILL BE DISPOSED OR UTILIZED IN A MANNER NOT OTHERWISE DESCRIBED, STATE THE METHOD OF UTILIZATION OR DISPOSAL |
| | TO BE USED AND THE OWNER AND LOCATION OF THE DISPOSAL OR PROCESSING FACILITY AND EXPLAIN. |
| | NOT APPLICABLE |
|] . | o o o lo lo lo |
| | |
| i | |

Powder to Cake consistency

APC-103 (Revised 1/76)

Page 2 of 2